

April 4, 2014

Mr. Donald D. Lamm
Diamond Star Associates, Inc.
4100 MacArthur Boulevard, Suite 310
Newport Beach, California 92660

LLG Reference: 2.13.3478.1

Subject: **Trip Generation Assessment for the
Costa Mesa Motor Inn Project at 2277 Harbor Boulevard
Costa Mesa, California**

Dear Mr. Lamm:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Trip Generation Assessment for the proposed Costa Mesa Motor Inn residential project located at 2277 Harbor Boulevard in the City of Costa Mesa. The 176,674-square foot (SF) project site (4.05 acres) is proposed to be developed with 236 apartment units. This letter summarizes the trip generation forecast for the proposed project, and compares the project's tripmaking potential against the existing use (236-room motel), and against the current General Plan Buildout designation for the site under two possible scenarios: (1) presumed as retail with 53,002 SF GLA, and (2) presumed as office with 53,002 SF GFA.

Traffic generation is expressed in vehicle trip ends, defined as a one-way vehicular movement, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in *Trip Generation*, (9th Edition), published by the Institute of Transportation Engineers (ITE) [Washington, D.C., 2012].

Table 1 presents the results of the trip generation assessment. The traffic forecast for the proposed project was calculated by applying ITE's Apartment trip generation factors to the 236 dwelling units. As **Table 1** indicates, the project is expected to generate 1,569 daily trips on a typical weekday, 121 AM peak hour trips, and 146 PM peak hour trips.

The ITE trip rates for Motels were applied to the existing 236-room motel (assuming all rooms are occupied). Comparing the existing trips against the project's tripmaking potential indicates that the project would result in a reduction of 581 daily trips and 30 AM peak hour trips, and a nominal increase of 9 PM peak hour trips. The trip increment during the PM peak hour is insignificant, especially when distributed over the entire 60-minute period; therefore, on that basis, the proposed

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project is not expected to significantly impact any intersections or roadways in the area.

The ITE trip rates for Shopping Centers were applied to estimate the trips generated by the current General Plan designation for the project site under Scenario 1, with the site developed as retail, corresponding to 53,002 SF GLA.

Under Scenario 1, comparing General Plan Buildout trips against project-generated traffic indicates that the project would generate fewer trips than what has been designated for the site in the General Plan, by 694 daily trips and 50 PM peak hour trips; however, the project would result in an increase of 70 PM peak hour trips that exceed the General Plan's trip budgets for the site. This increment also exceeds the City's 50-peak hour trip threshold for requiring detailed traffic impact analysis (TIA). In order for the project to not exceed the City's TIA criteria, the number of units must be reduced to 197 DU.

The ITE trip rates for General Office were applied to estimate the trips generated by the current General Plan designation for the project site under Scenario 2, with the site developed as office, corresponding to 53,002 SF GFA.

Under Scenario 2, a comparison between General Plan Buildout trips against project-generated traffic indicates that the project would result in an increase of 984 daily trips, 38 AM peak hour trips, and 67 PM peak hour trips, which exceed the General Plan's trip budgets for the site. The increment of 67 PM peak hour trips also exceeds the City's 50-peak hour trip threshold for requiring detailed traffic impact analysis. In order for the project to not exceed the City's TIA criteria, the number of units must be reduced to 208 DU.

We appreciate the opportunity to provide this letter. Should you have any questions, please call me at 949.825.6175.

Sincerely,

Linscott, Law & Greenspan, Engineers



Trissa (de Jesus) Allen, P.E.
Senior Transportation Engineer

Attachment

TABLE 1
PROJECT TRAFFIC GENERATION RATES AND FORECAST
2277 Harbor Boulevard (Costa Mesa Motor Inn), Costa Mesa

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<u>Trip Generation Factors [1]:</u>							
▪ ITE 220: Apartment (TE/DU)	6.65	0.10	0.41	0.51	0.40	0.22	0.62
▪ ITE 320: Motel (TE/Occupied Rooms)	9.11	0.23	0.41	0.64	0.31	0.27	0.58
▪ ITE 820: Shopping Center (TE/1,000 SF GLA)	42.70	0.60	0.36	0.96	1.78	1.93	3.71
▪ ITE 710: General Office (TE/1,000 SF GFA)	11.03	1.37	0.19	1.56	0.25	1.24	1.49
<u>Proposed Project:</u>							
▪ Apartments (236 DU)	1,569	24	97	121	94	52	146
<u>Existing Use:</u>							
▪ Motel (236 rooms)	2,150	54	97	151	73	64	137
Proposed Project Minus Existing Use:	(581)	(30)	0	(30)	21	(12)	9
<u>General Plan Buildout Scenario 1:</u>							
▪ Retail (53,002 SF GLA assumed)	2,263	32	19	51	94	102	196
Proposed Project Minus GPB Scenario 1:	(694)	(8)	78	70	0	(50)	(50)
▪ No. of Apartments Allowable = 197 DU to not exceed City's 50-peak hour trip threshold for requiring TIA	1,310 (953)	20 (12)	81 62	101 50	79 (15)	43 (59)	122 (74)
<u>General Plan Buildout Scenario 2:</u>							
▪ General Office (53,002 SF GFA assumed)	585	73	10	83	13	66	79
Proposed Project Minus GPB Scenario 2:	984	(49)	87	38	81	(14)	67
▪ No. of Apartments Allowable = 208 DU to not exceed City's 50-peak hour trip threshold for requiring TIA	1,383 798	21 (52)	85 75	106 23	83 70	46 (20)	129 50

Notes:

[1] Source: Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012). Average rates used.

TE/DU = Trip ends per Dwelling Unit

DU = Dwelling Unit